

REMARKS

Claim rejections under 35 USC 102

Claims 1-5 have been rejected under 35 USC 102(e) as being anticipated by Williams (2003/0110356). Claim 1 is an independent claim, from which claims 2-5 ultimately depend. Applicant submits that claim 1 is patentable over Williams. As such, claims 2-5 are patentable at least because they depend from a patentable base independent claim.

The standard for anticipation under 35 USC 102 is that every aspect of a claim must *identically* appear in a single prior art reference for it to anticipate the claim under 35 USC 102. (In re Bond, 15 USPQ2d 1566 (Fed. Cir. 1990)) “[T]here must be *no difference* between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention.” (Scripps Clinic & Research Found. v. Genentech, Inc., 18 USPQ2d 1001, 1010 (Fed. Cir. 1991)) In this respect, Applicant submits that claim 1 is patentable over Williams under 35 USC 102 because it is not anticipated by Williams.

Claim 1 recites temporarily storing a second memory line “in a buffer,” where the buffer “also stor[es] eviction data regarding the first memory line.” That is, it is important to recognize that the buffer in which the second memory line is temporarily stored is also the buffer that stores eviction data regarding the first memory line. The same buffer stores both of these items, in other words, in the claimed invention.

Furthermore, claim 1 has been amended so that “the eviction data is stored in only the buffer, such that the eviction data is never stored in any buffer other than the buffer.” Support for this claim amendment is found throughout the patent application as filed, where the eviction data is only described as being stored in a single buffer. Applicant also notes that the MPEP states “[t]he subject matter of [a] claim need not be described literally (i.e., using the same terms or in haec verba) in order for the disclosure to satisfy the description requirement.” (MPEP sec 2163.02) In this respect, the MPEP states:

By disclosing in a patent application a device that inherently performs a function or has a property, operates according to a theory or has an advantage, a patent application necessarily discloses that function, theory or advantage, even though it

says nothing explicit concerning it. The application may later be amended to recite the function, theory or advantage without introducing prohibited new matter.

(MPEP sec. 2163.07(a))

By comparison, Williams teaches that the eviction data is stored in both a “fill buffer 12” and a “write buffer 14.” As to the former, the Examiner noted in the advisory action that the eviction data is stored in Williams in the fill buffer 12. As to the latter, the Examiner noted on page 4 of the final office action that the eviction data is also stored in Williams in the write buffer 14. Thus, per the Examiner’s own interpretation of Williams, this reference discloses that the eviction data is stored in *two* buffers – both the fill buffer and the write buffer – and not in “only the [fill] buffer, such that the eviction data is never stored in any buffer other than the [fill] buffer,” in contradistinction to the claimed invention. Therefore, Williams cannot anticipate claim 1 under 35 USC 102. Every aspect of the invention does not “*identically*” appear in Williams, in contradistinction to the standard for anticipation under Bonds noted above. There is “*a difference*” between the invention and Williams as viewed by a person of ordinary skill in the art, in contradistinction to the standard for anticipation under Scripps Clinic noted above.

Indeed, Applicant notes that there are advantages associated with temporarily storing the second memory line to be cached in a buffer that also stores eviction data regarding the first memory line. In particular, utilization of such a buffer means that performance benefits associated with temporarily storing the second memory line can be achieved without having to add a buffer that exists solely for the purpose of temporarily storing the second memory line. Rather, this buffer can be, as described on page 6, lines 3-5 of the specification, “an existing buffer that is originally intended for a purpose other than temporary storage of [such] data.” “[T]he use of an existing buffer to temporarily store memory lines to be cached, pending the eviction of other memory lines in the cache, allows for . . . performance benefits without increasing the resources needed by the system.” (Specification, p. 11, para. 44, ll. 6-9.)

Therefore, claim 1 provides advantages that Williams cannot achieve. The performance benefits of temporarily storing a second memory line while waiting for a first memory line to be

evicted are achieved in claim 1 “without increasing the resources needed” (specification, p. 11, para. 44, ll. 6-9), because the buffer that is already being used for storing eviction data regarding a first memory line is also used for temporarily storing the second memory line. By comparison, Williams teaches a separate fill buffer 12 dedicated for the purpose of temporarily storing the second memory line. As such, Williams does not realize performance benefits “without increasing the resources needed,” but rather *with* increasing the resources needed.

Claim rejections under 35 USC 103

Claims 6-9 have been rejected under 35 USC 103(a) as being unpatentable over Williams in view of Chryson (6,549,930). Claims 6-9 are dependent claims, depending ultimately from independent claim 1. Therefore, claims 6-9 are patentable because they each depend from a patentable base independent claim, claim 1. That is, insofar as Williams does not teach certain elements of claim 1, as has been discussed above, Williams in combination with Chryson cannot teach all the elements of claims 6-9 under 35 USC 103, because claims 6-9 depend from and incorporate the limitations of claim 1.

Conclusion

Applicants have made a diligent effort to place the pending claims in condition for allowance, and request that they so be allowed. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Mike Dryja, Applicants' Attorney, at 425-427-5094, so that such issues may be resolved as expeditiously as possible. For these reasons, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



Michael A. Dryja, Reg. No. 39,662
Attorney/Agent for Applicant(s)

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Law Offices of Michael Dryja
1474 N Cooper Rd #105-248
Gilbert, AZ 85233
tel: 425-427-5094
fax: 425-563-2098